

ABSTRACT

Oxygen-scavenging polymers and packaging for holding oxygen-sensitive products.

A heat treatment process has been found to significantly increase the oxygen-scavenging performance of the polymer. The enhanced scavenging polymer can be effectively incorporated into various packaging, including transparent multilayer containers for beer and juice. In one embodiment, a multilayer package made from the scavenger provides an actual reduction in oxygen content of a contents of the package, over a long period of time (e.g., 24 weeks). The package can be stored unfilled for an extended period (without significant loss of scavenging capability) and will scavenge substantially immediately upon filling with a liquid product. The package may incorporate a relatively low weight percentage of the scavenger, thus providing enhanced scavenging in a cost-effective manner.